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**CLAIMS**

What is claimed is:

1. A method comprising the steps of:

employing a virus-free certificate firewall in controlling and filtering files using a virus-free certificate including:

- receiving a file;

if a virus-free certificate is required for the file, determining whether the a virus-free certificate is already associated with the file;

if a virus-free certificate is already associated with the file, authenticating the associated virus-free certificate, said virus-free certificate comprising a certificate signature;

if the virus-free certificate is authenticated, determining whether the file is virus-free or not:

if the file is virus-free, forwarding the file with the associated virus-free certificate;

if the virus-free certificate is not authenticated or if no virus-free certificate is associated with the file determining whether the file is virus-free or not;

1 if the file is virus-free, associating with the file a new  
2 virus-free certificate, and forwarding the file with the new  
3 virus-free certificate.

4 2. The method according to claim 1, further comprising the  
5 steps of:

- 6 • identifying the file in a table, said table comprising for  
7 each identified file at least one anti-virus criteria;  
8 • referring to the table and retrieving at least one of said  
9 at least one anti-virus criteria,; and  
10 • determining from said at least one anti-virus criteria  
11 whether a virus-free certificate is required for the file  
12 or not.

13 3. The method according to claim 2, wherein the step of  
14 referring to the table and retrieving at least one of said at  
15 least one anti-virus criteria includes the step of determining  
16 whether or not the identified file satisfies the requirements  
17 of the retrieved anti-virus criteria.

18 4. The method according to claim 1, wherein the virus-free  
19 certificate comprises a file signature for determining that  
20 the file is virus-free.

21 5. The method according to claim 1, wherein the virus-free  
22 certificate includes a list of anti-virus programs that have  
23 been executed on the file;

1 6. The method according to any one of the preceding claims  
2 wherein the virus-free certificate (200) further comprises at  
3 least one of the following:

- 4 • a file identification;
- 5 • a virus-free certificate authority identification;
- 6 • a public key for decrypting the file signature;
- 7 • a certificate signature for authenticating the virus-free  
8 certificate; and
- 9 • an indication of the virus-free certificate validity.

10 7. The method according to claim 1, wherein said step of  
11 determining whether the file is virus-free or not includes:

- 12 • decrypting the file signature using a public key comprised  
13 in the virus-free certificate;
- 14 • hashing the file to generate a file digest; and
- 15 • comparing the decrypted file signature with the generated  
16 file digest.

17 8. The method according to any one of the preceding claims  
18 wherein said step of determining whether the file is  
19 virus-free or not comprises the further step of

- 20 • if the file is not virus-free, discarding (413) the file.

21 9. The method according to claim 1, wherein the step of  
22 authenticating the virus-free certificate includes:

23 validating the virus-free certificate, and

1 verifying that the list of said at least one anti-virus  
2 program comprised in the virus-free certificate is included in  
3 a list of anti-virus programs associated with the file in the  
4 table.

5 10. The method according to claim 1, wherein the step of  
6 associating with the file a new virus-free certificate  
7 includes the step of requesting a virus-free certificate from  
8 a virus-free certificate authority.

9 11. The method according to claim 1, wherein the step of  
10 associating with the file a new virus-free certificate  
11 includes the step of retrieving a virus-free certificate from  
12 a cache, said cache storing existing virus-free certificates.

13 12. The method according to any one of the preceding claims  
14 wherein the step of forwarding the file with the new  
15 virus-free certificate includes updating a cache with the new  
16 virus-free certificate.

17 13. A system comprising means adapted for carrying out the  
18 method according to claim 1.

19 14. A computer program comprising instructions for carrying  
20 out the method according to claim 1.

21 15. An article of manufacture comprising a computer usable  
22 medium having computer readable program code means embodied  
23 therein for causing employment of a virus-free certificate  
24 firewall, the computer readable program code means in said  
25 article of manufacture comprising computer readable program

1 code means for causing a computer to effect the steps of claim  
2 1.

3 16. A computer program product comprising a computer usable  
4 medium having computer readable program code means embodied  
5 therein for causing employment of a virus-free certificate  
6 firewall, the computer readable program code means in said  
7 computer program product comprising computer readable program  
8 code means for causing a computer to effect the steps of claim  
9 1.

10 17. A program storage device readable by machine, tangibly  
11 embodying a program of instructions executable by the machine  
12 to perform method steps for employment of a virus-free  
13 certificate firewall, said method steps comprising the steps  
14 of claim 1.